

8. Ground Water Program

The Ground Water Characterization Program's (GWCP) primary objective is to address ground water availability issues in the Commonwealth to support water supply planning and groundwater management efforts. Part of this effort includes evaluation and analysis of existing groundwater quantity and quality information. Summaries of the evaluation of quantity and quality data for the Coastal Plain may appear, as appropriate, in future water quality assessment reports.

DEQ is in the process of developing a State-wide Ambient Ground Water Quality Monitoring Program strategy document and companion implementation plan. DEQ Groundwater Characterization program (GWCP) staff provided [a brief overview of the major programmatic goals](#) [III-C-8a] to the Groundwater Protection Steering (GWPS) Committee in mid January 2013. GWPS stakeholders were invited to review and provide comments on a draft strategy to be completed by late summer 2013. The current [list of perspective analytes](#) [III-C-8b.xls] to be included in the Ground Water Monitoring Program includes 72 analytes: 20 dissolved and 20 total metals, hardness, various measures of dissolved and suspended solids and nutrients, and physical attribute such as acidity, pH, specific conductance, and color.

The strategy will address the five "W's", or who, what, why, when, and where. Existing water quality data in the GWCP database and a recent USGS Professional Paper 1772 titled, "[Groundwater – Quality Data and Regional Trends in the Virginia Coastal Plain 1906-2007](#)" is currently being analyzed to determine the spatial distribution of monitoring points for each drainage basin west of the fall line. Network design in the Coastal Plain will be based on the current chloride monitoring network being operated by the USGS Virginia Water Science Center under contract to DEQ.

The actual number, location, and sampling frequency of observation wells will be included in an annual implementation document which will address annual funding levels for staffing and analytical costs.

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